WHAT IS CLAIMED IS

1. A dental bur structure connectable to means of rotation, particularly useful for removing a dental post containing composite material,

comprising:

a. a rotatable shaft, said rotatable shaft including a proximal portion relative to the means of rotation, a distal portion relative to the means of rotation;

b. a tip located at the end of said distal portion of said rotatable shaft, said tip possessing a smooth surface and an end which generates heat upon rotation of said shaft to melt a portion of the matrix in the vicinity of said tip; and

c. means for removing composite material of said post upon rotation of said rotatable shaft, said means for removing said composite compounds located at said proximal portion of said rotatable shaft.

2. The structure of claim 1 in which said tip smooth surface further comprises an endless surface converging to a rounded end.

3. The structure of claim 2 in which said endless surface comprises a concave surface.

4. The structure of claim 1 in which said tip smooth surface further comprises an endless surface converging to a sharp tip.

5. The structure of claim 1 in which said endless surface comprises a concave surface.

6. The structure of claim 1 in which said means for removing composite material comprises a fluted surface.

7. The structure of claim 7 in which said fluted surface comprises a plurality of cutting flutes each having a rake angle of between 5 degrees and 25 degrees.

8. The structure of claim 7 which further comprises a dentin abrading surface at said proximal portion of said rotatable shaft, said means for removing elongated fibers from the matrix lying between said tip and said abrading surface.

9. The structure of claim 7 in which said dentin abrading surface comprises a rasp.

10. The structure of claim 9 in which said rasp comprises a plurality of diamond particles.

11. The structure of claim 8 in which said dentin abrading surface is capable of removing dentin.

12. A dental bur structure connectable to means of rotation for removing material in a dental canal,

comprising:

a. a rotatable shaft, said rotatable shaft including a proximal portion relative to the means of rotation and a distal portion relative to the means of rotation;

b. a terminus located at the distal portion of said rotatable shaft, said terminus including a shoulder portion of a

first cross-sectional dimension and a tip extending from said shoulder portion and possessing a tip having a cross-sectional dimension less than said cross-sectional dimension of said shoulder portion, said tip having an end for generating heat upon rotation of said shaft to melt a portion of the material in the dental canal; and

c. means for removing the material from the dental canal upon rotation of said shaft located further said proximal portion of said rotatable shaft than said shoulder.

13. The structure of claim 12 in which said tip of said terminus is conical.

14. The structure of claim 12 in which said tip of said terminus is frusto-conical.

15. The structure of claim 12 in which said tip of said terminus is cylindrical.

16. The structure of claim 12 in which said means for removing material from the dental canal comprises a fluted surface.

17. The structure of claim 12 which additionally comprises a dentin abrading surface at said proximal portion of said rotatable shaft, said dentin abrading surface comprising a knurled surface having a plurality of grits thereupon.

18. The structure of claim 17 in which said tip of said terminus is conical.

19. The structure of claim 18 in which said tip of said terminus is cylindrical.

20. The structure of claim 12 in which said shoulder portion includes a radiused edge.

21. The structure of claim 20 in which said means for removing material from the dental canal comprises a fluted surface.

22. A dental bur structure connectable to means of rotation for removing material in a dental canal,

comprising:

a. a rotatable shaft, said rotatable shaft including a proximal portion relative to the means of rotation and a distal potion relative to the means of rotation;

b. a terminus located at the distal portion of said rotatable shaft, said terminus including a tip said tip having an end portion for generating heat upon rotation of said shaft to melt a portion of the material in the dental canal; and

c. means for removing the material from the dental canal upon rotation of said shaft, said means including a fluted surface lying immediately adjacent said tip.

23. The structure of claim 22 which additionally comprises a dentin abrading surface at said proximal portion of said rotatable shaft, said dentin abrading surface comprising a knurled surface having a plurality of grits thereupon.

24. The structure of claim 23 in which said tip of said terminus is conical.

25. The structure of claim 24 in which said tip of said terminus is frusto-conical.

26. The structure of claim 22 in which said tip includes a roughened surface.

27. The structure of claim 23 in which said abrading surface includes grits selected from the group consisting essentially of:

diamond and carbide.